IN THE SPECIFICATION

Please amend the SUMMARY section of the specification as follows:

Examples of high rate data transmission in a communication system are disclosed. In one example, an infrastructure element is configured to time-division-multiplex a plurality of orthogonally covered digital data sequences and a sequence of pilot symbols to generate a sequence of digital values for transmission on a communications channel, where a first subset of the plurality of orthogonally covered digital data sequences precedes in time the sequence of pilot symbols and the sequence of pilot symbols precedes in time a second subset of the plurality of orthogonally covered digital data sequences. A communication unit is configured to receive the time-division-multiplexed signal including a plurality of orthogonally covered data sequences and a sequence of pilot values, and demodulate the plurality of orthogonally covered data sequences.

~~The present invention is a novel and improved method and apparatus for high rate packet data transmission in a CDMA system. The present invention improves the efficiency of a CDMA system by providing for means for transmitting data on the forward and reverse links. Each mobile station communicates with one or more base stations and monitors the control channels for the duration of the communication with the base stations. The control channels can be used by the base stations to transmit small amounts of data, paging messages addressed to a specific mobile station, and broadcast messages to all mobile stations. The paging message informs the mobile station that the base station has a large amount of data to transmit to the mobile station.~~

~~It is another object of the present invention to improve performance by transmitting from the selected base station at the peak transmit power for the duration of one or more time slots to a mobile station at the data rate requested by the mobile station. In the exemplary CDMA communication system, the base stations operate at a predetermined back off (e.g., 3 dB) from the available transmit power to account for variations in usage. Thus, the average transmit power is half of the peak power. However, in the present invention, since high speed data transmissions~~

~~are scheduled and power is typically not shared (e.g., among transmissions), it is not necessary to back-off from the available peak transmit power.~~

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~~It is yet another object of the present invention to enhance efficiency by allowing the base stations to transmit data packets to each mobile station for a variable number of time slots. The ability to transmit from different base stations from time slot to time slot allows the data communication system of the present invention to quickly adapt to changes in the operating environment. In addition, the ability to transmit a data packet over non contiguous time slots is possible in the present invention because of the use of sequence number to identify the data units within a data packet.~~

~~It is yet another object of the present invention to increase flexibility by forwarding the data packets addressed to a specific mobile station from a central controller to all base stations which are members of the active set of the mobile station. In the present invention, data transmission can occur from any base station in the active set of the mobile station at each time slot. Since each base station comprises a queue which contains the data to be transmitted to the mobile station, efficient forward link transmission can occur with minimal processing delay.~~

~~It is yet another object of the present invention to provide a retransmission mechanism for data units received in error. In the exemplary embodiment, each data packet comprises a predetermined number of data units, with each data unit identified by a sequence number. Upon incorrect reception of one or more data units, the mobile station sends a negative acknowledgment (NACK) on the reverse link data channel indicating the sequence numbers of the missing data units for retransmission from the base station. The base station receives the NACK message and can retransmit the data units received in error.~~

~~It is yet another object of the present invention for the mobile station to select the best base station candidates for communication based on the procedure described in U.S. Patent Application Serial No. 08/790,497, entitled "METHOD AND APPARATUS FOR PERFORMING SOFT HANDOFF IN A WIRELESS COMMUNICATIONS SYSTEM," filed January 29, 1997, now U.S. Patent No. 6,151,502, issued November 21, 2000, by Roberto Padovani et al., assigned to the assignee of the present invention and incorporated by reference herein. In the exemplary embodiment, the base station can be added to the active set of the mobile station if the received pilot signal is above a predetermined add threshold and dropped from the active set if the pilot signal is below a predetermined drop threshold. In the alternative embodiment, the base station can be added to the active set if the additional energy of the base station (e.g., as measured by the pilot signal) and the energy of the base stations already in the active set exceeds a predetermined threshold. Using this alternative embodiment, a base station which transmitted energy comprises an insubstantial amount of the total received energy at the mobile station is not added to the active set.~~